

Durham Research Online

Deposited in DRO:

09 November 2010

Version of attached file:

Published Version

Peer-review status of attached file:

Peer-reviewed

Citation for published item:

Sutcliffe, D. and Rae, J. and Bevan, G. and Barzey, C. and Chappel, D. (1999) 'Using the National Drug Treatment Monitoring System (NDTMS) data in the North East.', Discussion Paper. North East Public Health Observatory, Stockton on Tees.

Further information on publisher's website:

[http://www.nepho.org.uk/publications/537/OccasionalPaper14_UsingtheNationalDrugTreatmentMonitoringSystem\(NDTMS\)DataintheNorthEast.pdf](http://www.nepho.org.uk/publications/537/OccasionalPaper14_UsingtheNationalDrugTreatmentMonitoringSystem(NDTMS)DataintheNorthEast.pdf)

Publisher's copyright statement:

Additional information:

North East Public Health Observatory Occasional Paper Series No. 14.

Use policy

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a [link](#) is made to the metadata record in DRO
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Please consult the [full DRO policy](#) for further details.

Using the National Drug Treatment Monitoring System (NDTMS) data in the North East

Background

Drug misuse in the UK is now a serious cause of morbidity and mortality. In response to an increase in the prevalence of drug misuse the Government created The National Treatment Agency for Substance Misuse (NTA) in 2001 to improve the availability, capacity and effectiveness of treatment for drug misuse in England as part of its National Drug Strategy. In April 2001 responsibility for NDTMS moved from the Department of Health to the NTA. In the North East region, the most significant recent change was the development of the North East regional NDTMS team in April 2004, under the management of the North East PHO. This development coincided with the introduction of electronic data transfer.

The present system requires all reporting treatment services (>110) to provide data electronically to the regional team on a monthly basis, using the core data set of 29 items (plus 1 additional regionally specific item).

The rationale for data collection and monitoring has been to identify the number of people receiving structured treatment (as opposed to advice or needle exchange) where their primary presenting substance is a drug (excluding alcohol or tobacco)

to ensure that:

- Service commissioning is effective and responsive to need; and
- Those requiring drug treatment are able to receive it in a timely and appropriate manner.

Beyond performance management the opportunity exists to use the NDTMS core dataset alongside other locally held data sources to illustrate regional and local variations in problematic substance misuse.

In this paper we aim to:

- Provide a descriptive summary of the most pertinent results for the North East Region.
- Highlight variation in provision, treatment outcomes and how individuals first make contact with treatment centres; and
- Raise the profile of the NDTMS dataset to answer questions which lead to better treatment outcomes

Contents

Background	1
Summary	1
Analysis of data	2
Demography	2
Prevalence	3
Primary Drug Use	4
Referral Source	5
Modality	7
Treatment Outcomes	7
Lengths of Treatment	10
Conclusions	11
Recommendations	11
References	12

Summary

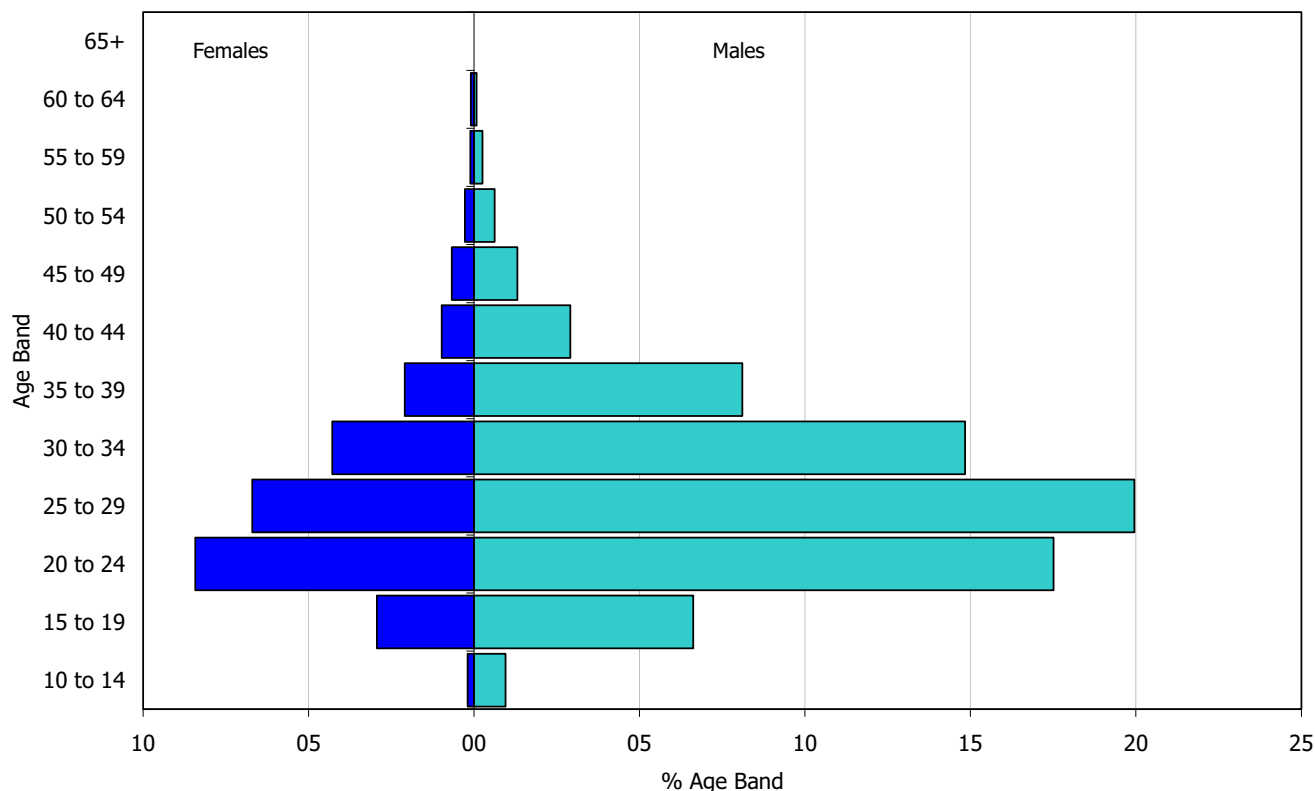
- Between April 1st 2004 and 31st March 2005 9,875 people were receiving structured treatment for problematic substance misuse in the North East.
- The majority of those receiving treatment were white (95%) male (73%) and under the age of thirty (61%) with little variation within the region in this regard.
- There is wide variation within the North East region in rates of people receiving treatments.
- The majority of people in treatment report problems resulting from the use of opiates.
- There was wide variation within the North East region in sources of referrals, retention of service users in treatment and treatment outcomes.

Analysis of NDTMS data

Demographic characteristics of service users

This section describes the demographic characteristics of individuals receiving structured treatment from the Drug Action Teams (DATs) in 2004/05 in the North East region. Each individual is counted once [n=9,875] irrespective of the number of episodes and attendance at more than one agency. Age is taken from their first contact with a treatment agency.

Figure 1: Age and sex distribution of individuals receiving treatment in the North East 2004/05



Gender

The gender composition of those receiving treatment was consistent with national findings¹; over two thirds (73%) are male, with little variation of this figure between Drug Action Teams – from 68% in North Tyneside and 77% in Middlesbrough.

Age

The median age at first contact with the treatment agencies was 27 for males and 25 for females: 61% of males and 68% of females were below the age of 30 on their first contact with the treatment services. In 2003/04, the median age nationally of those in treatment centres was 26.80².

Ethnicity

The vast majority of individuals (95%) were recorded as White British, with 2% of individuals having no recorded ethnicity. There was no significant variation between the drug treatment agencies in this respect.

Prevalence

The actual prevalence of problematic drug users (PDUs) in the population can only be estimated. Several methodologies exist to calculate this estimate. These methods are based on assumptions that cannot always be tested and they provide estimates that are inherently uncertain, but they are the best available approach; the figures presented in Table 1 have been calculated using the Multiple Indicator Method (MIM)³ sourced from the North East NTA.

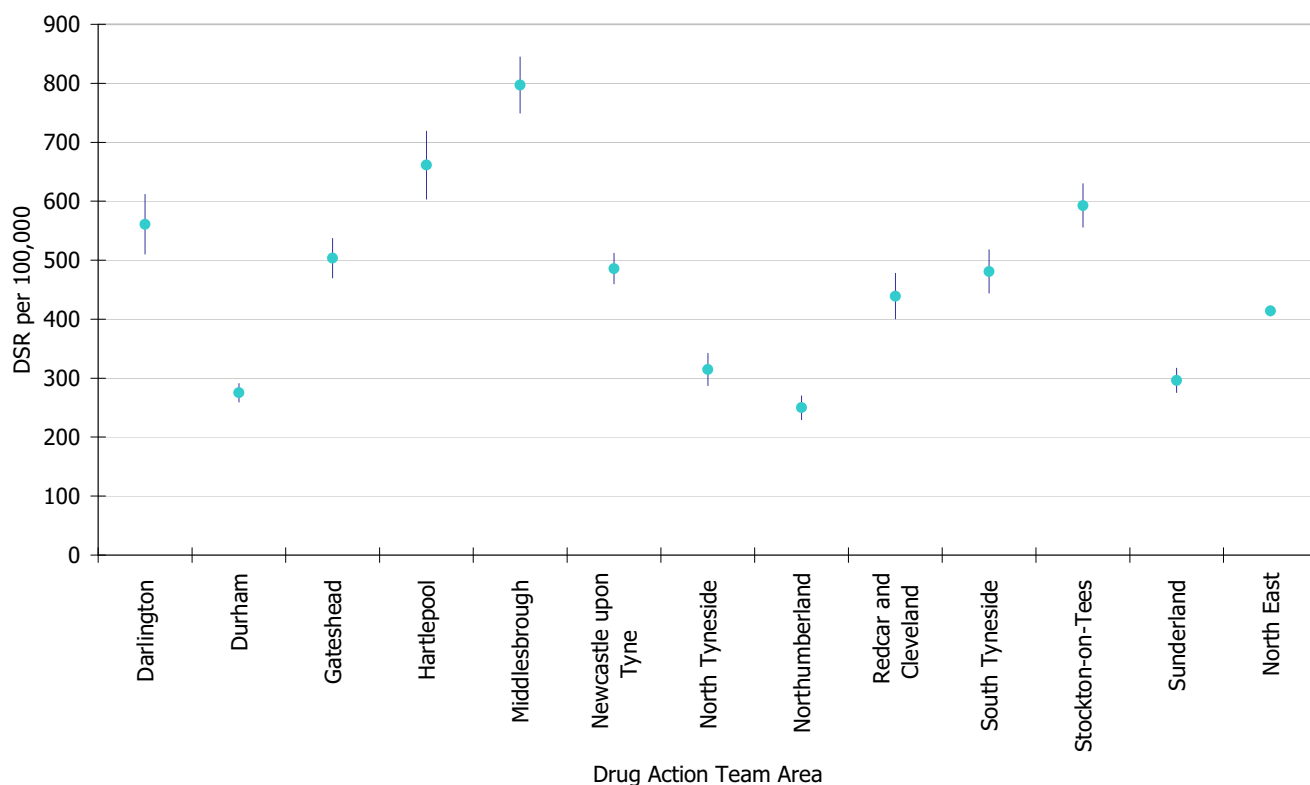
The estimated size of problematic drug users in the population can be used to give an indication of the extent to which problem drug users in a given population access treatment services, however it is important to keep in mind four points when using estimated populations of Problem Drug users:

- Actual prevalence can only be indirectly estimated
- Methods are based on assumptions that cannot always be tested
- They provide estimates that are inherently uncertain
- Drug Action Teams may have their own figures that differ from the ones published here

Table 1: Estimated Number of Problematic Drug Users (PDUs) and number in treatment Across Drug Action Teams in the North East

Drug Action Team Area	Estimated Problem Drug User Population	Numbers in Treatment	Percentage in Treatment
Darlington	772	474	61%
Durham	2493	1185	48%
Gateshead	1262	872	69%
Hartlepool	876	503	57%
Middlesbrough	1109	1065	96%
Newcastle upon Tyne	1900	1366	72%
North Tyneside	1045	519	50%
Northumberland	1518	599	39%
Redcar and Cleveland	959	498	52%
South Tyneside	1048	659	63%
Stockton-on-Tees	1110	995	90%
Sunderland	1677	798	48%

Figure 2: Directly Age Standardised Rate per 100,000 of individuals receiving treatment by Drug Action Teams Area, 2004/05



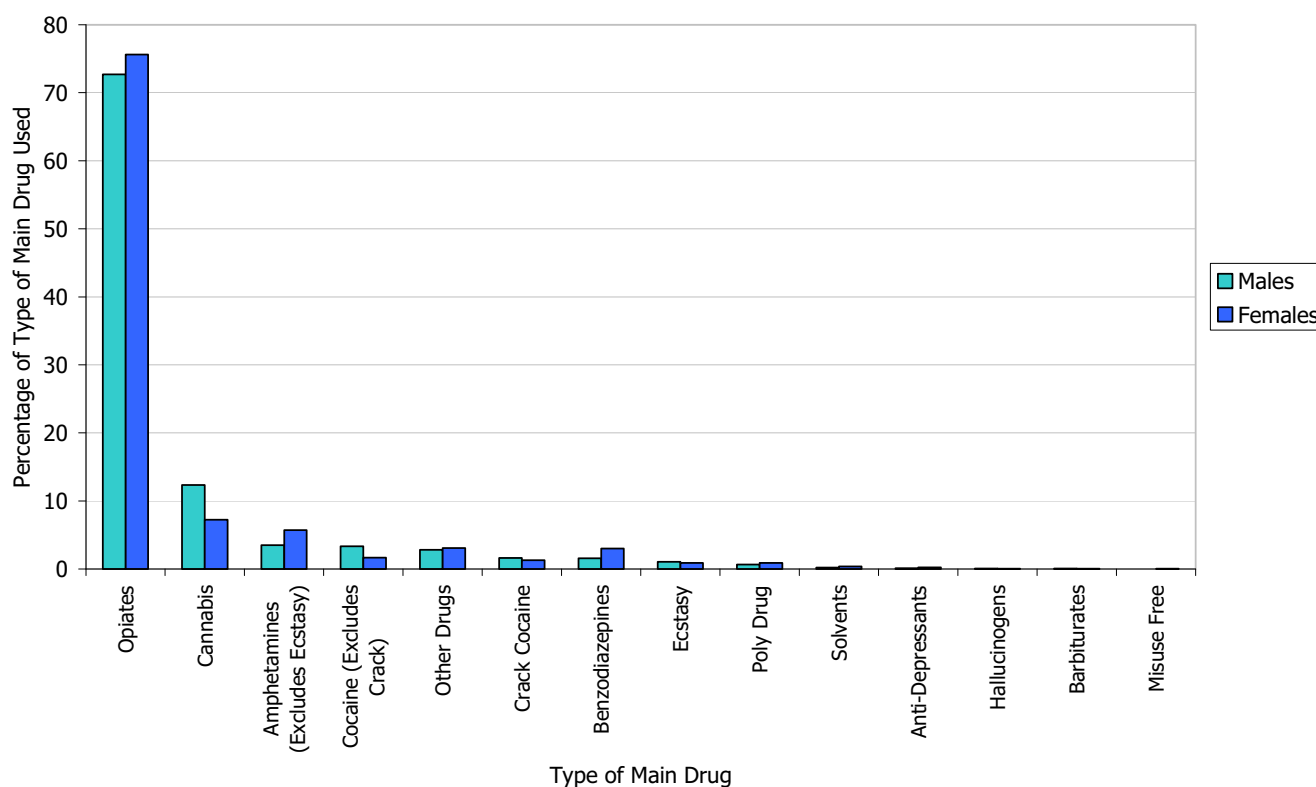
Rates of individuals receiving treatment vary significantly between Drug Action Teams across the region. Reasons for variation include the level of substance misuse in the population, the proportion of those in treatment (Table 1) and the quality of data collection.

Primary Drug Use

Figure 3 illustrates the main drug use of people in structured treatment across the region.

While overall both nationally and regionally the majority of those receiving treatment cited opiates as their main drug problem⁴ (73% of males and 76% for females in the North East), there was some national variation with the North East having a higher proportion citing opiates and lower proportion citing crack and cocaine as the main drug problem compared to London and the Eastern region.

Figure 3: Main drug use across episodes by gender 2004/05



There was no significant variation within the region in the relative proportion of type of drug cited as the main drug problem.

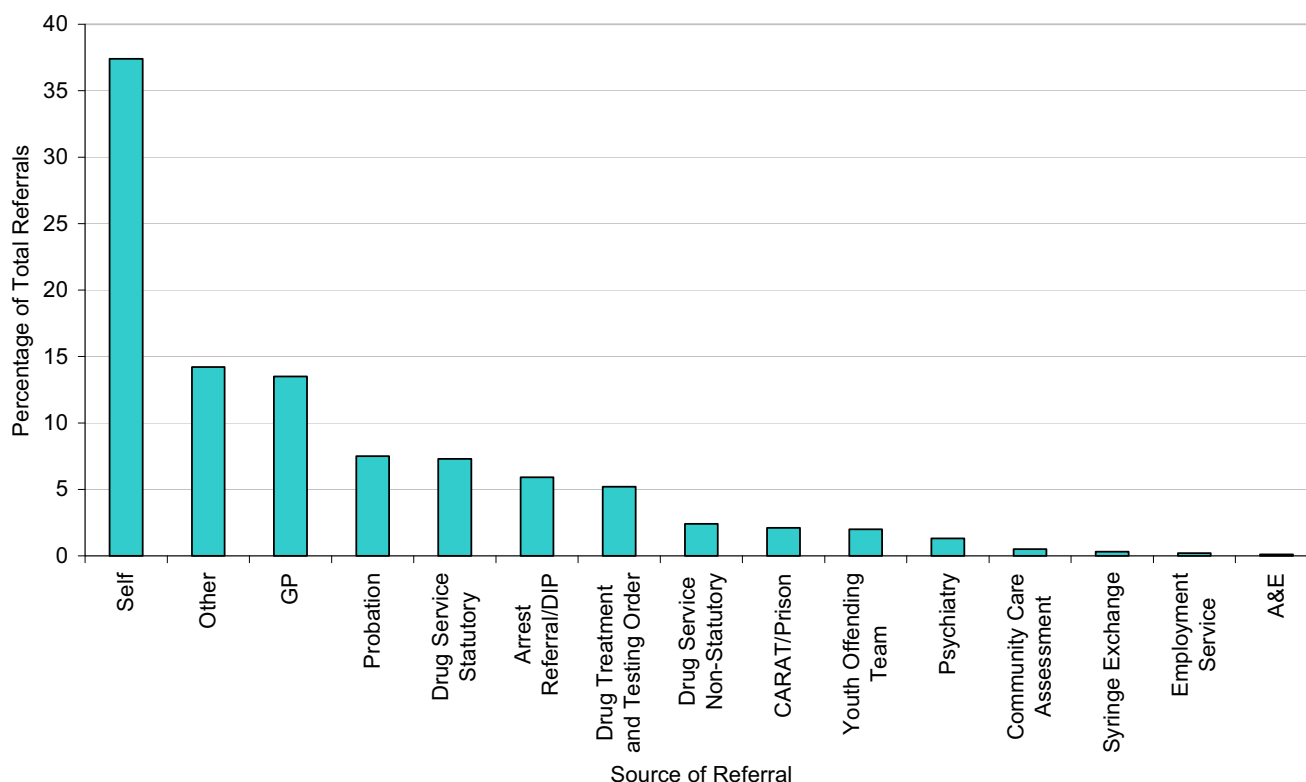
The opiates group includes 3 sub groups: heroin which comprised 94% of the total, methadone (3%) and other opiates e.g. morphine (3%). However users may switch between any of these three depending on the availability of the drugs.

Referral sources

Figure 4 illustrates the source of referral by which people made contact with the treatment services. Many people made contact with more than one treatment agency and each separate contact is included in the analysis.

The largest source of referral was 'Self' (38%), although there was some wide variation within the region in the number of self-referrals, from 21% in Sunderland and 56% in Redcar and Cleveland

Figure 4: Source of Referral



Drug Interventions Programme (DIP)

The Drug Interventions Programme (DIP), formerly known as the Criminal Justice Interventions Programme (CJIP) is a major part of the updated drug strategy for reducing drug-related crime. The Program aims to take advantage of opportunities within the criminal justice system for accessing drug-misusing offenders, many of whom are difficult to access by other approaches, and moving them into treatment, away from drug use and crime.

Table 2: Drug Action Teams in the North East taking part in the Drug Interventions Programme

Phase one Drug Action Teams (April 2003)	Phase two Drug Action Teams (April 2004)	Phase three Drug Action Teams (April 2005)
Middlesbrough	Hartlepool	Gateshead
	Newcastle	
	Stockton	
	Sunderland	

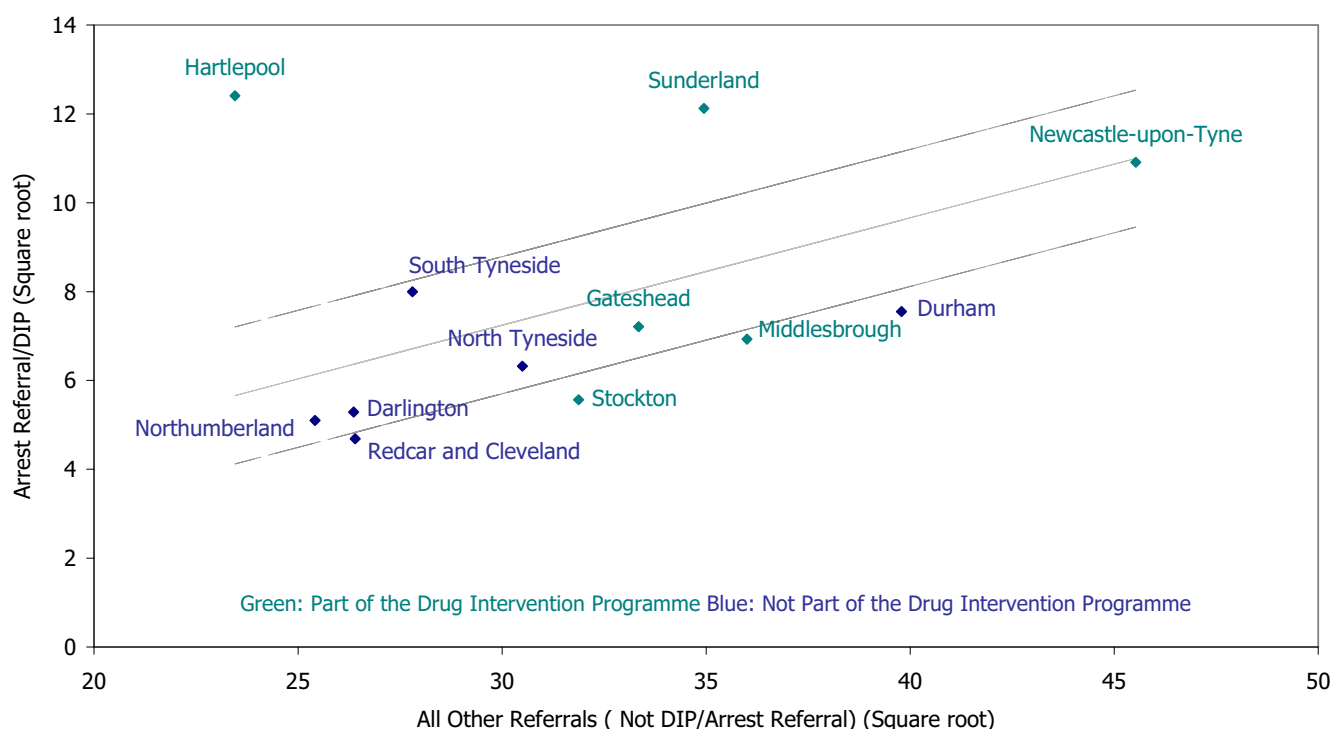
The Drug Interventions Programme was introduced in three phases (see table 2) with Middlesbrough Drug Action Team taking part in phase one, Hartlepool, Newcastle, Stockton and Sunderland joining as part of phase two and Gateshead joining as part phase three. North Tyneside, South Tyneside, Durham,

Darlington, Northumberland and Redcar & Cleveland are not part of the Drug Interventions Programme, but referrals do still come through the criminal justice system.

There was wide variation in referrals from the Drug Interventions Programme and Arrest Referral which cannot be easily explained by the different dates at which Drug Action Teams joined the Drug Interventions Programme or whether or not they are part of the programme.

Figure 5: Control Chart of Referrals from the Drug Intervention Programme

Figure 5 is a Shewhart control chart where the middle line represents the regional trend and the outer lines are control limits set at three standard deviations about the regional trend. Any data points falling outside these control limits suggest variation greater than that which might be expected through purely random variation.



The control chart illustrates that there is a lower proportion of referrals through the Drug Interventions Programme and Arrest Referrals for Middlesbrough and Stockton compared to other Drug Action Teams in the Drug Interventions Programme. Hartlepool and Sunderland have the highest proportion

Modality

The specific treatments provided by the services refer only to the first in each episode as individuals may receive more than one type of treatment.

The most common modality was 'Specialist Prescribing' - prescriptions from a consultant - accounting for over 30% of modalities, followed by 25% for GP Prescribing and 19% for structured counselling.

Young people specific treatment modalities were not collected separately from adult treatment modalities at the time of data collection and so cannot be specifically reported on.

Treatment Outcomes

Treatment outcome is determined by the discharge reason at the end of each episode and is given across the North East Region as a whole.

Figure 6: Discharge Reasons

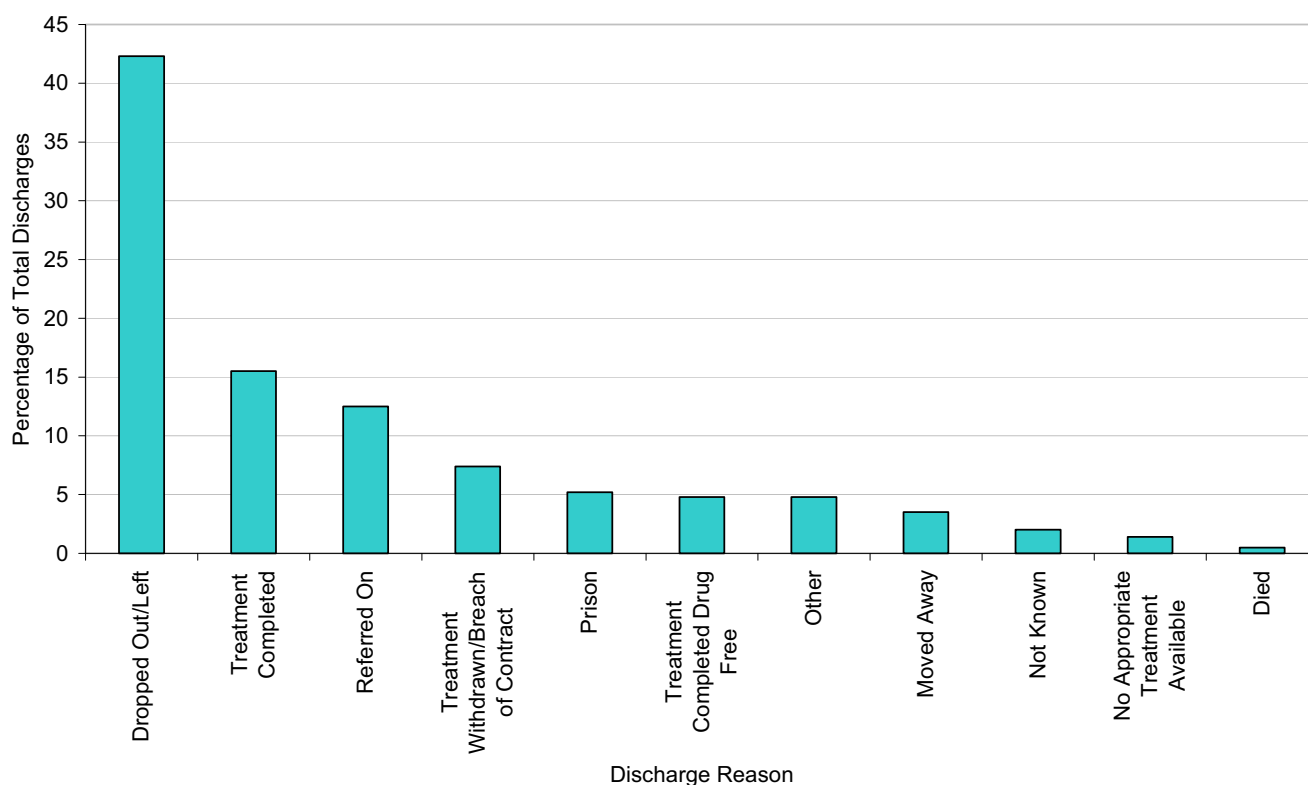


Figure 6 illustrates that of those that had left treatment, the majority had dropped out (42%). The ratio of males to females dropping out of treatment does not differ significantly from the ratio of males to females as a whole.

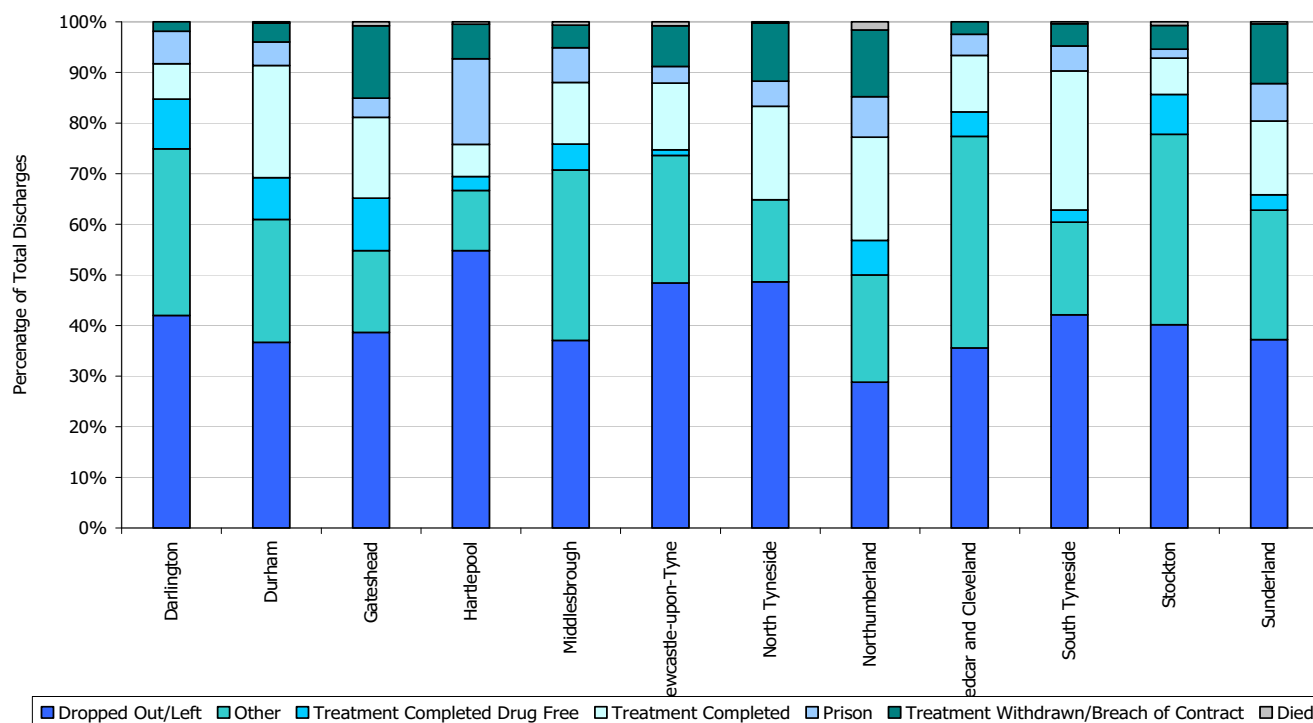
The second largest group was 'Treatment Completed' (16%), individuals comprising this group have completed some form of treatment but are not free of substance misuse, some will go on to have further treatment.

Across the North East region 5% of finished episodes were recorded as 'Treatment Completed Drug Free'. There was wide variation between Drug Action Teams in this regard.

Figure 7 illustrates the wide variation in the numbers who dropped out between Drug Action Teams, from over 50% in Hartlepool to less than 30% in Northumberland.

There is considerable variation across the region in terms of finished episodes recorded as 'Treatment Completed Drug Free', from 0% in North Tyneside to 10% in Gateshead (CI: 8.16 - 13.09) .

Figure 7: Breakdown of Discharge Reason by Drug Action Team



These significant differences are also illustrated in figure 8 in which the middle line represents the regional trend and the outer two grey lines represents and the upper and lower control limits are set at three standard deviations about the regional trend.

Figure 8: Control Chart plotting Treatment Completed Drug Free against all discharges

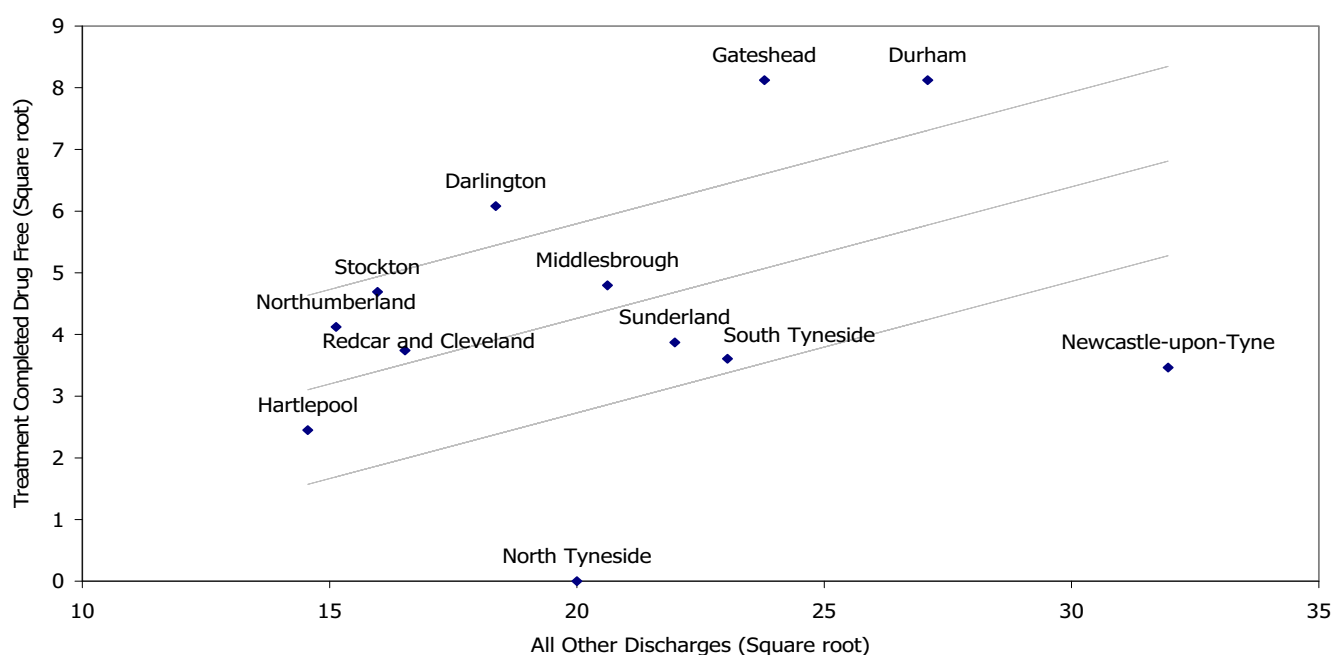


Figure 8 illustrates that North Tyneside and Newcastle-upon-Tyne have the lowest proportion of people leaving treatment drug free, while Darlington, Gateshead and Durham have the highest proportion.

Lengths of Treatment

In common with findings from elsewhere in the country⁵, regionally 60% of episodes were 'ongoing' at the end of 2004/05.

Figure 9: Length of Treatment by Drug Action Teams

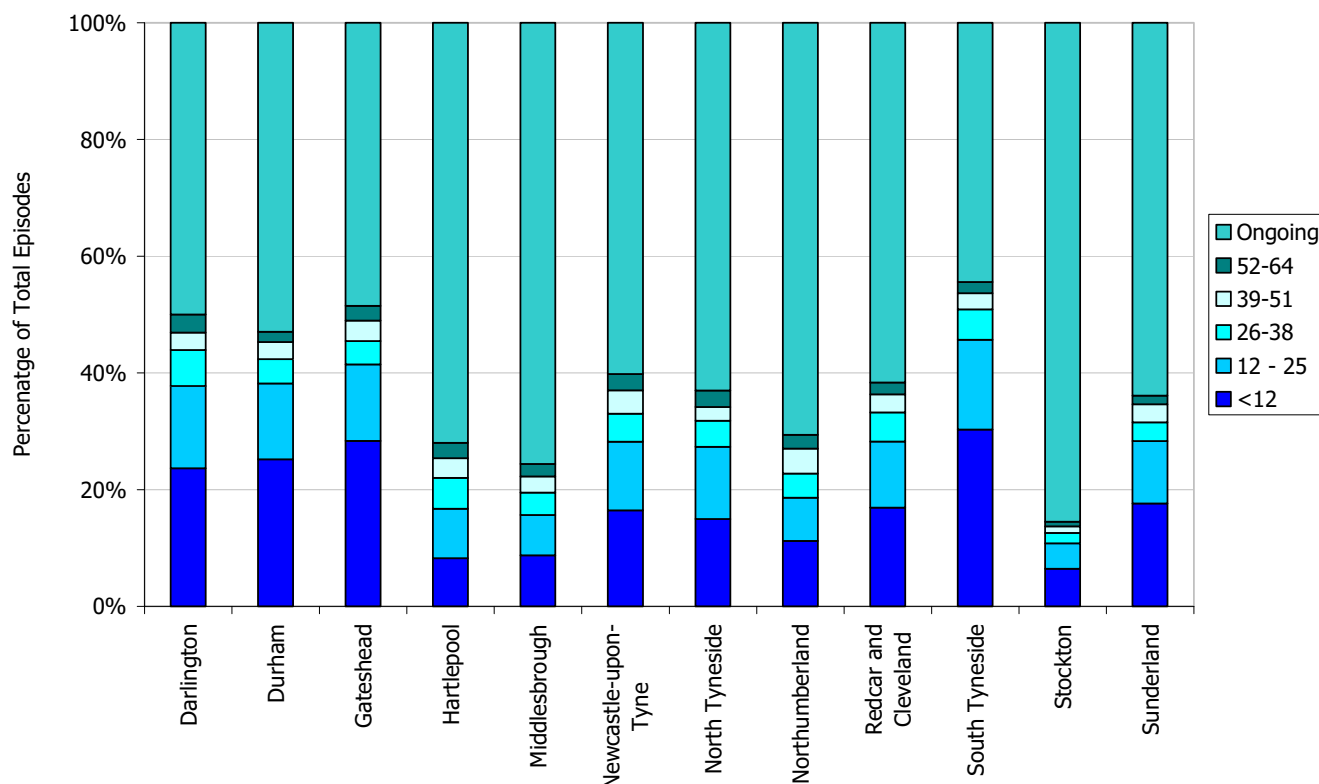


Figure 9 illustrates the length of treatments in weeks by Drug Action Team. There is wide variation between Drug Action Teams in terms of the number of ongoing episodes and in lengths of treatments. Retention in treatment for twelve weeks is used as a target as there is evidence that this is the minimum needed to start to get good results.

Some of the variation in the percentage of ongoing episodes between Drug Action Teams may be explained by data completeness and data quality in particular for Drug Action Teams that have seen agencies decommissioned and no discharge date for service users have been captured.

Some of the variation in the percentage of episodes ending in less than twelve weeks may be the result of some Drug Action Teams having specialist 'young people services', where the treatment modalities are not designed to last more than twelve weeks.

Conclusion

The use of NDTMS data for Public Health purposes has considerable potential in aiding our understanding of problematic substance misuse in relation to those receiving treatment, in particular in highlighting inequalities in provision and treatment outcomes. However, its greatest potential may be in highlighting areas for further investigation in conjunction with other data sources, to gain a fuller picture of substance misuse at a regional and national level, to inform public health policy and go in some way to reduce health inequalities.

Recommendations

- Data quality and completeness has improved dramatically but remains a concern e.g. around the recording of treatment outcomes. Agencies need to be supported so they have the appropriate staff and training in place for accurate and timely recording of data.
- The NDTMS dataset should be used by commissioners and Primary Care Organisations to a greater extent to improve service provision within their locality.
- The wide variation in terms of recorded treatment outcomes is a cause of concern, in terms of the numbers dropping out of treatment and the numbers completing treatment drug free. Given that previous research indicates that the strongest predictor of retention and completion of treatment was related to the agency attended not the characteristic of the client⁶ we recommend the following:
 - Research must be undertaken to assess if the variation in numbers dropping out of treatment is 'real' or an artefact of the way in which information is recorded differently between Drug Action Teams.
 - If the variation is 'real' then we recommend effective stakeholder partnerships to encourage the sharing of skills and lessons learnt to improve the equity of client retention and treatment outcomes across agencies.
 - Following feedback from stakeholders we recommend that where an individual has dropped out of treatment but is referred again to the same agency within 21 days, then the two episodes should be calculated as one continuous episode.
- In order to make effective use of NDTMS data we recommend that the full postcode of service users should be added as an extra item in the North East. This would mean that service and public health planners can overcome problems arising from changes in geographical boundaries of commissioning organisations and electoral wards when analysing trends in service provision and treatment outcomes.

Authors

Daniel Sutcliffe, Health Information Analyst
Dr. Jacqueline Rae, Post Doctoral Research Associate
Gez Bevan, Public Health Liaison Manager NDTMS
Christopher Barzey, NDTMS Systems Integration Manager
Dr. David Chappel, Assistant Director (Programmes)

Acknowledgements

We would like to thank all those in Drug Treatment Agencies and Drug Action Teams who have contributed to NDTMS. We also acknowledge the advice and support from the North West PHO.

References

¹NATIONAL TREATMENT AGENCY FOR SUBSTANCE MISUSE:

www.nta.nhs.uk/programme/national/performance_information.htm

² Linear interpolated value of data from:

NATIONAL TREATMENT AGENCY FOR SUBSTANCE MISUSE

www.nta.nhs.uk/programme/national/performance_information.htm

³Martin Frischer, Heath Heatlie & Mathew Hickman. *Estimating the prevalence of problematic and injecting drug use for drug action team areas in England: a feasibility study using the multiple indicator method*. Department of Medicines Management Keele University, Centre for Research on Drugs and Health Behaviour Imperial Medical School London. 2003

⁴NATIONAL TREATMENT AGENCY FOR SUBSTANCE MISUSE:

www.nta.nhs.uk/programme/national/performance_information.htm

⁵LIVERPOOL JMU, NWPHO. *Drug Treatment in the North West of England*. 2004.

⁶NATIONAL DRUG EVIDENCE CENTRE (NDEC), THE UNIVERSITY OF MANCHESTER NATIONAL TREATMENT AGENCY NTA *Treatment effectiveness: demonstration analysis of treatment surveillance data about treatment completion and retention*. 2004

North East Public Health Observatory
Wolfson Research Institute
University of Durham Queen's Campus
University Boulevard
Stockton on Tees
TS17 6BH
ENGLAND

Telephone: +44(0)191 3340400
Fax: +44(0)191 3340391

Website: <http://www.nepho.org.uk>
Enquiries: info@nepho.org.uk

ISBN 1-903945-42-9